# Firmware Analysis of NetBotz (APC - Schneider Electric) Rack Monitor 570/550/450 and Wall Monitor 455/355 - 4.5.3

#### March 30, 2018

#### Meta Data

HID	NetBotz (APC - Schneider Electric) Rack Monitor 570/550/450 and Wall
	Monitor 455/355 - 4.5.3
Device Name	Rack Monitor 570/550/450 and Wall Monitor 455/355
Vendor	NetBotz (APC - Schneider Electric)
Device Class	DVR
Version	4.5.3
Release Date	2016-11-02
Size	21.58 MiB (22,632,490 bytes)

## Analysis

#### base64decoder

Time of Analysis	2018-03-29 13:02:26
Plugin Version	0.1.2
Summary	

#### cpu architecture

Time of Analysis	2018-03-29 13:06:10
Plugin Version	0.3.1
Summary	PPC (M)

#### crypto material

Time of Analysis	2018-03-29 13:02:05
Plugin Version	0.5
Summary	

#### exploit mitigations

Time of Analysis	2018-03-29 13:06:14
Plugin Version	0.1.1
Summary	

#### file hashes

Time of Analysis	2018-03-29 13:06:19
Plugin Version	1.0
imphash	None
md5	aff3ed2821d4a3c0e1cb0a56c0048393
ripemd160	450c7e078958fd4b58214005acb44a7fc36c6f58
sha1	164 eb 4233 b78 da 456232 c082 dc af 5a0 dd 4021919
sha256	26 e f 0 25078 a b da 69 d 2 c 3 d e 0 6 e 27142 a 6 d b 1 a 6385 b d 2524 c e 4976211570264 a 3920 d b 1 a 6385 b d 2524 c e 497620 d b 1 a 6385 b d 2524 c e 497620 d b 1 a 6385 b d 2524 c e 497620 d b 1 a 6385 b d 2524 c e 497620 d b 1 a 6385 b d 2524 c e 497620 d b 1 a 6385 b d 2524 c e 497620 d b 1 a 6385 b d 2524 b d 2
sha512	

 $\frac{\mathrm{da38955f0df1be8e9713967c6d2e5d5d27ca1bd421e96f9159ab802b4586d8b4b1fe62dbb2092ed4b85219}{\mathrm{ssdeep}} \\ 393216:JCWk8T1ykEFKvGf+/9vFmYS678jcZOzzyHGUPccDuHiWcCWTi0PlhHa:a8TokvQ+lU2} OzQPuCWyTXlhybialasel$ 

 $\frac{\text{whirlpool}}{2517 \text{d} 24 \text{d} 06 \text{ac} 652 \text{e} 06 \text{b} \text{f} \text{b} \text{b} 32 \text{b} 4 \text{b} 1 \text{a} 70 \text{e} 899 \text{a} 6 \text{b} 0 \text{a} 48963 \text{e} 9 \text{f} 2262204 \text{a} 3 \text{e} 303 \text{b} 80 \text{f} 6 \text{e} 44 \text{c} 66027781 \text{e} \text{d} 412557 \text{d} \text{f} 4 \text{b} \text{f} 64 \text{b} \text{d} 3 \text{b} 788190 \text{e} 1000 \text$ 

#### file type

Time of Analysis	2018-03-29 13:05:56
Plugin Version	1.0
File Type	uImage header, header size: 64 bytes, header CRC: 0x759DDD, created:
	Fri Sep 30 15:50:56 2016, image size: 22632426 bytes, Data Address:
	0x0, Entry Point: 0x0, data CRC: 0x3E9EC215, OS: Linux, CPU: Pow-
	erPC, image type: RAMDisk Image, compression type: gzip, image name:
	"V4_5_3_20160930_1058"
MIME	firmware/u-boot
Summary	firmware/u-boot

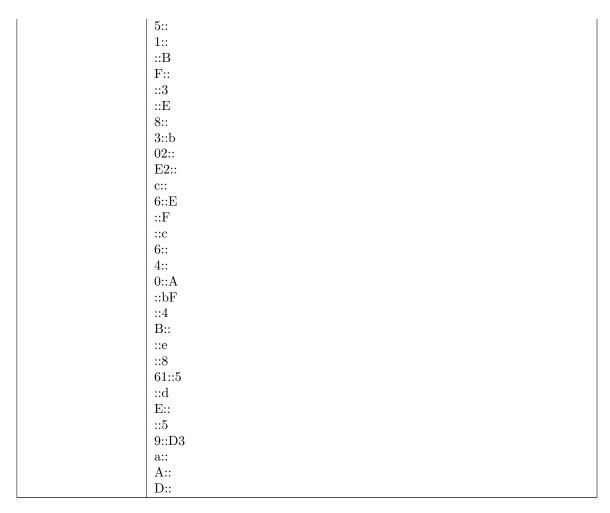
#### init systems

Time of Analysis	2018-03-29 13:05:59
Plugin Version	0.4.1
Summary	

#### ip and uri finder

Time of Analysis	2018-03-29 13:01:59
Plugin Version	0.4.1
IPs v4	list is empty

ID C	Log
IPs v6	83::
	::9F
	::a
	::2D2
	2::7
	:
	7::
	C::
	5::
	1::
	::B
	F::
	::3
	::E
	8::
	3::b
	02::
	E2::
	c::
	6::E
	::F
	::c
	6::
	4::
	0::A
	::bF
	::4
	B::
	::e
	::8
	61::5
	::d
	E::
	::5
	9::D3
	a::
	A::
	D::
URIs	list is empty
Summary	83::
	::9F
	::a
	::2D2
	2::7
	::
	:: 7::
	C::
	~



#### software components

Time of Analysis	2018-03-29 13:05:50
Plugin Version	0.3
Summary	

## printable strings

Time of Analysis	2018-03-29 13:05:39
Plugin Version	0.2
string count	45253

## users and passwords

Time of Analysis	2018-03-29 13:05:47
Plugin Version	0.4
Summary	

# string evaluator

Ti	me of Analysis	2018-03-29 13:06:08
Pl	ugin Version	0.2
str	ring count	45253

# unpacker

Time of Analysis	2018-03-29 13:01:18	
Plugin Version	0.1	
Plugin	Uboot	
Extracted	2	
Output:		
Output		
size packed -> un-	21.57 MiB -> 21.58 MiB	
packed		
entropy	0.89	
Summary	no data lost	

#### malware scanner

Time of Analysis	2018-03-29 13:05:52
Plugin Version	0.3
MD5	aff3ed2821d4a3c0e1cb0a56c0048393
System Version	0.2.6
Scanners Number	1
Positives	0
Scanners	ClamAV
Scanns	ClamAV :: version:ClamAV 0.99.4/24430/Thu Mar 29 06:23:16 2018
	ClamAV :: result:clean
	ClamAV :: detected:False
Summary	